

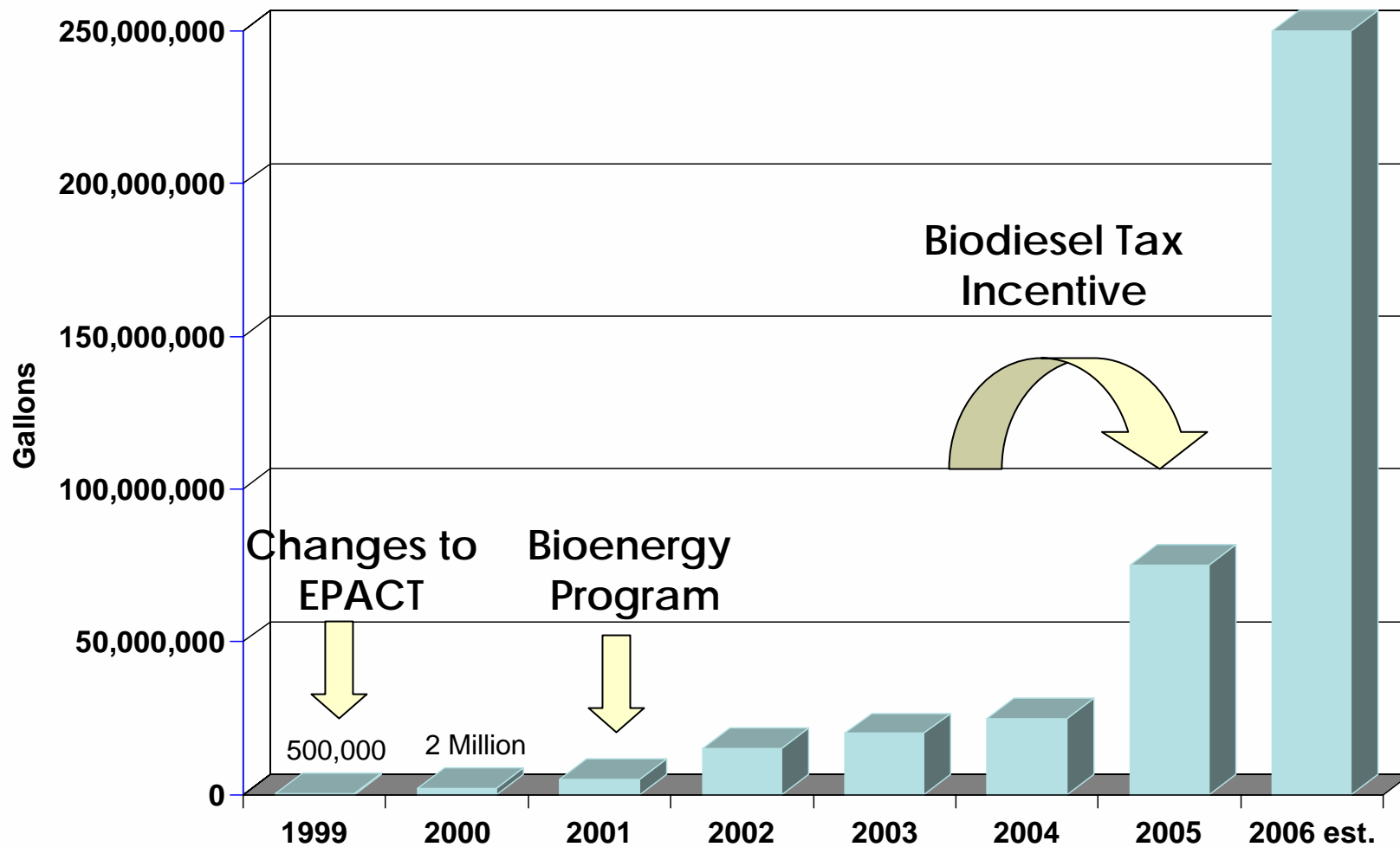
2007 Clean Cities Northeast and Mid-Atlantic Regional Peer Exchange

June 27th

Tom Verry



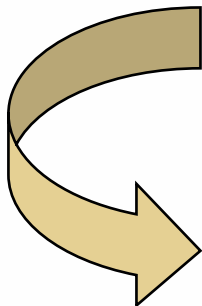
US Biodiesel Demand



Biodiesel Fuel Markets



- Federal
- State
- Selected Utilities



- Recreational
- Tour Boats
- Environmentally Sensitive Areas



- Lubricity Enhancement
- Conductivity Improver
- ULSD Sulfur Free Blend Stock



Future Growth & New Markets

- ◆ Bioheat
- ◆ Arbitrage Market
- ◆ New State Legislation; NY, WA, IA,
- ◆ Green Cargo Fleets & Greenhouse Gas Market
- ◆ Underground Mines



Heating Oil Market

- ◆ Almost as much heating oil is sold in the Northeast as on-highway diesel fuel
 - 5.1 billion gallons vs. 5.5 billion gallons
- ◆ Heating oil industry is attempting to remake itself as more environmentally friendly and renewable
- ◆ Could provide a good winter outlet for biodiesel
- ◆ Work is being conducted to integrate into Underwriters Laboratory certification




If Every Trucker Used B2



The industry would utilize 761 million gallons of B100 annually.



Truck Stops – BioTrucker.com and “Biodiesel Hotline” 866 BIODIESEL



BIO TRUCKER
www.biotrucker.com


America's Farmers
Fueling America's Truckers

Welcome!

- [Biodiesel Fueling Sites](#)
- [Trucker Testimonials](#)
- [Biodiesel FAQs](#)
- [Biodiesel News](#)
- [OEM Information](#)
- [Become a BioTrucker](#)
- [Discussion Boards](#)
- [Related Links](#)

Trucker Resources

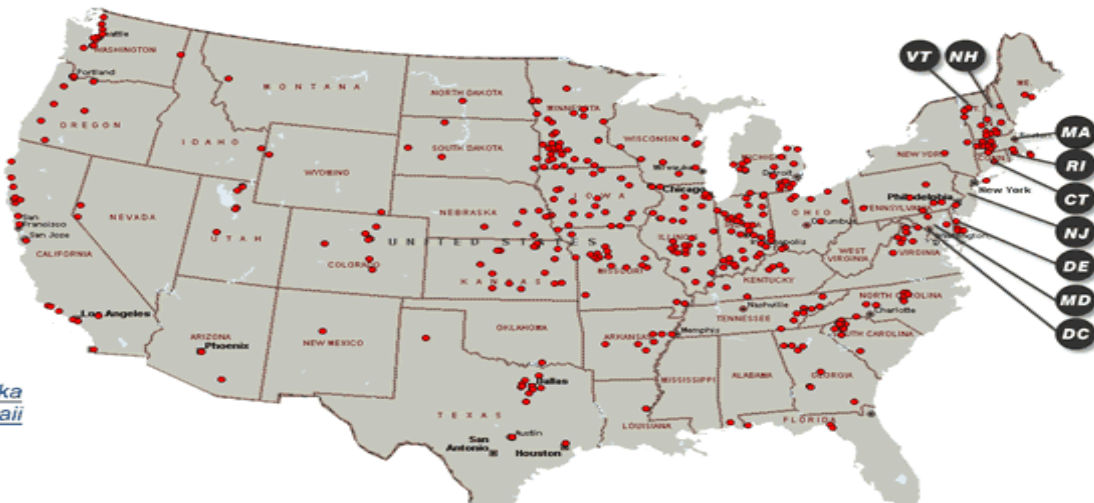
- [Road/Traffic Conditions](#)
- [Weather Conditions](#)



Find Out What Minnesota Truck Drivers are Saying About Biodiesel

BIODIESEL FUELING SITES

Click anywhere on the map below to find *truck-accessible* biodiesel retail locations in the United States



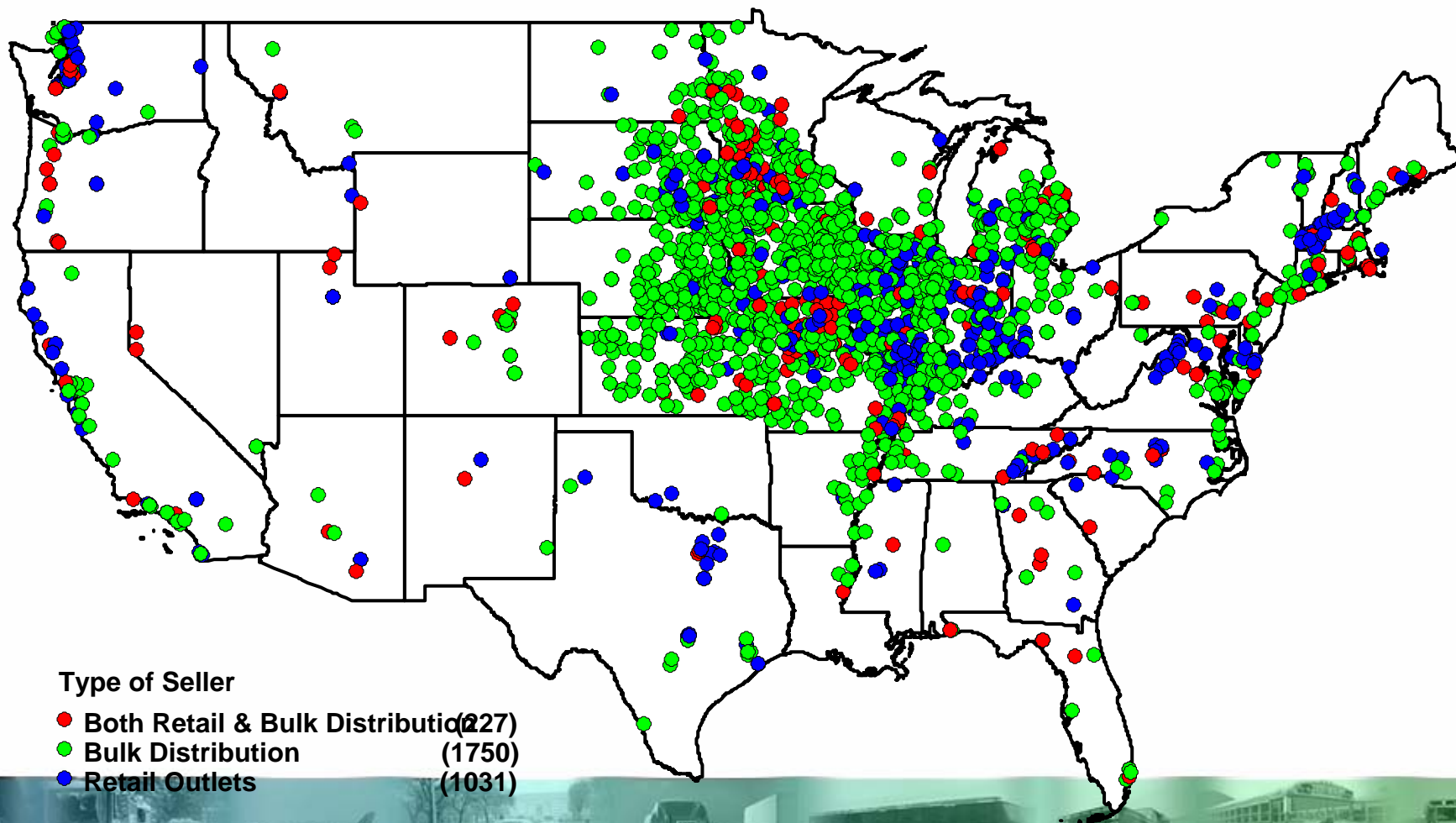
- [Alaska](#)
- [Hawaii](#)

Availability

- ◆ Over 1,850 petroleum distributors now offer biodiesel.
- ◆ 1,051 retail locations
- ◆ 604 truck stops or truck accessible locations
Biotrucker.com
- ◆ 37 terminals
- ◆ <http://biodiesel.org/buyingbiodiesel/guide/>



Distribution Locations



Terminal Blending



TRANSMONTAIGNE

The Fuel Supply Chain.

Managing Assets, Distribution and Supply Chain Services

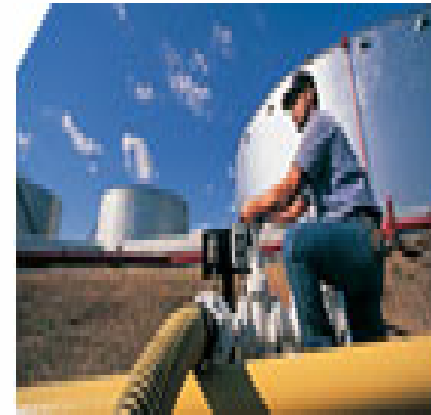


- ◆ Blending is occurring at over 37 terminals nationwide.
- ◆ DOE has supported this effort.



Pipelines?

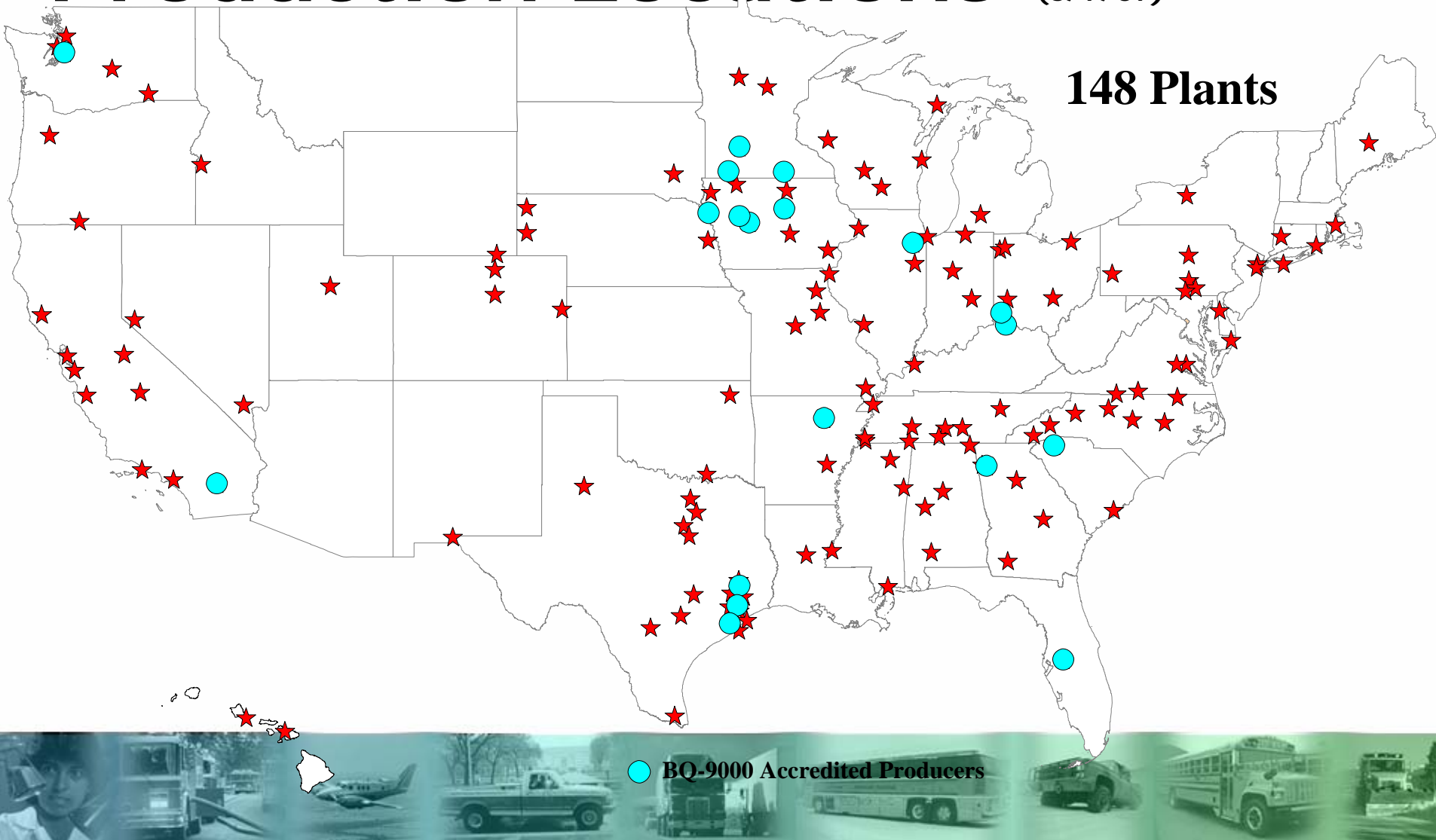
- ◆ 75,000 barrels of B5 moved on the Colonial Pipeline from Houston to New Jersey.
- ◆ DOE supported test.
- ◆ Other test scheduled



Biodiesel Production Capacity



Production Locations (6/7/07)



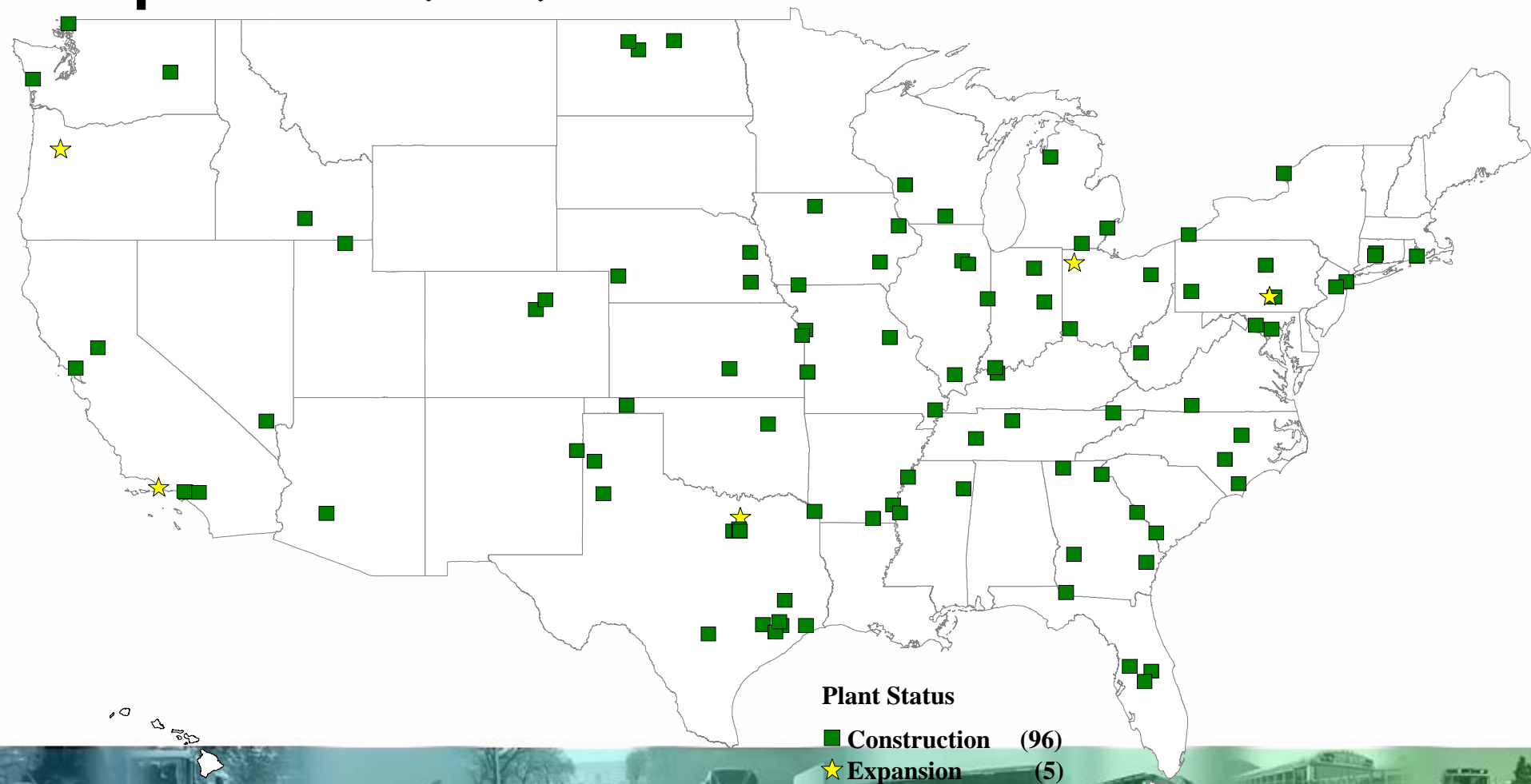
Industry Plant Size

Plant Size (gallons per year)	# of Companies (148 total)
< 1,000,001	29
1,000,001 – 5,000,000	58
5,000,001 – 10,000,000	25
10,000,001 – 15,000,000	9
15,000,001 – 20,000,000	4
>20,000,000	23

Industry Capacity 1.39 billion gallons per year
Average Plant Size 9.4 million gallons per year



Biodiesel Plants Under Construction & Expansion (6/7/07)



Size of Plants Under Construction & Expansion

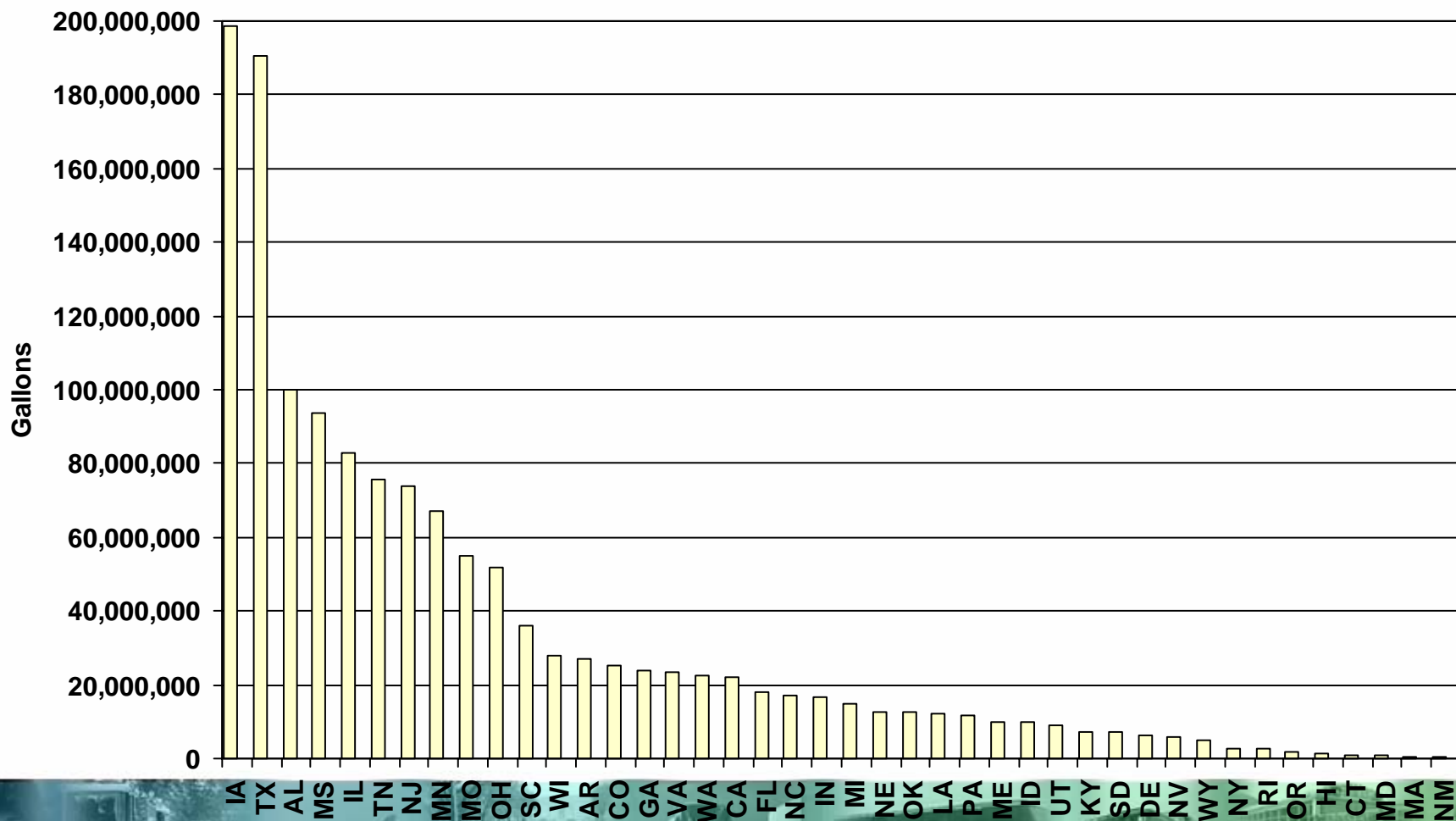
Plant Size (gallons per year)	# of Companies (101 total)
< 1,000,001	12
1,000,001 – 5,000,000	34
5,000,001 – 10,000,000	17
10,000,001 – 15,000,000	7
15,000,001 – 20,000,000	2
>20,000,000	29

Construction Capacity 1.89 billion gallons per year
Average Plant Size 18.7 million gallons per year



Production Capacity by State

(6/7/07)

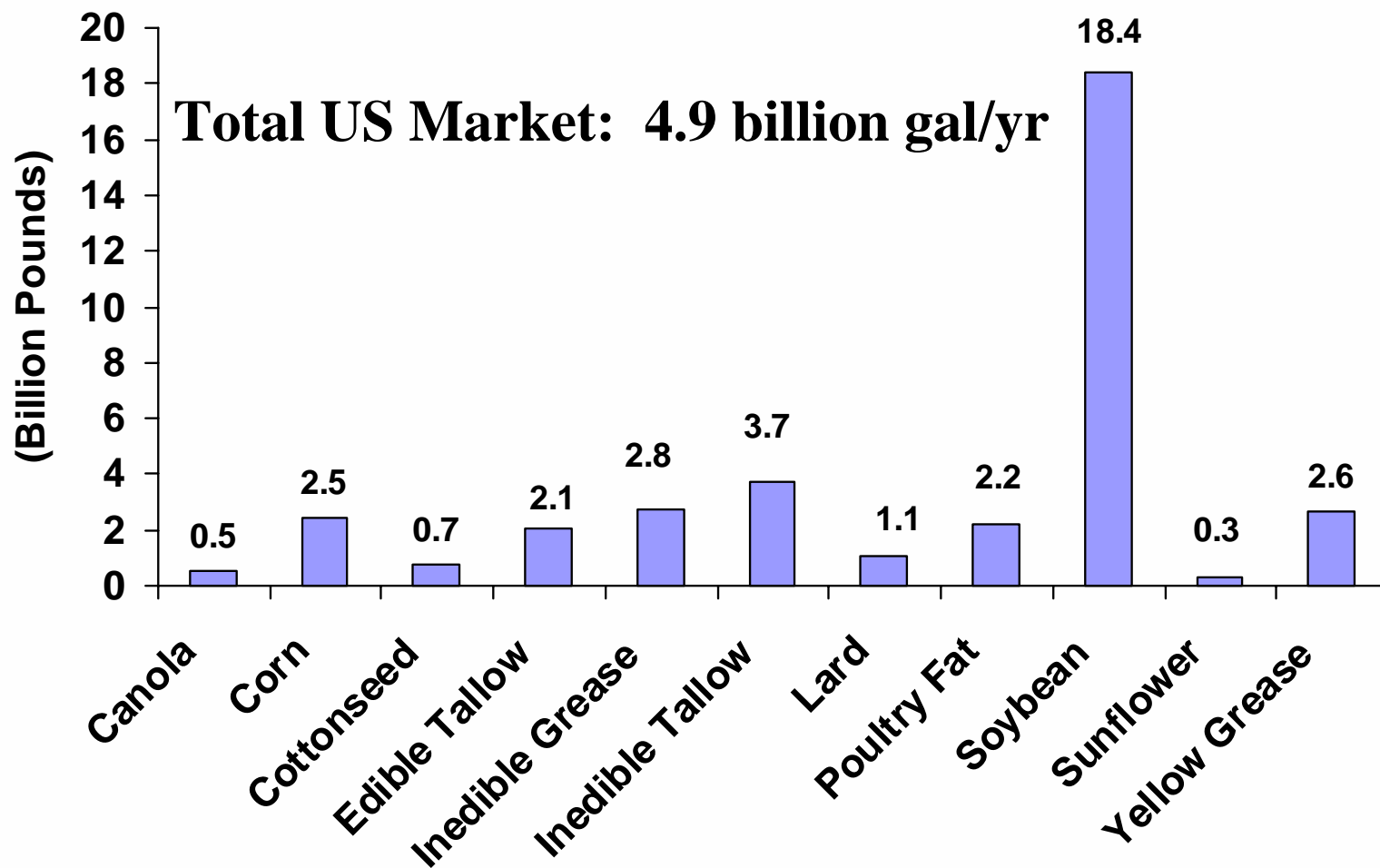


Production Capacity Trends

- ◆ The industry is trending toward larger facilities
- ◆ Vegetable oil facilities are larger than recycled cooking oil plants
- ◆ Plants capable of handling multiple feedstocks are becoming more common
- ◆ Production capacity does not equal production for several reasons
 - Some facilities are just starting up
 - Some facilities choose to run less than 24/7
 - Some facilities have not effectively debottlenecked their systems to maximize their output
 - Some facilities overestimate their capacity



2004 US Fats & Oils Production



Alternative Feedstock's?

- ◆ Mustard, canola, camelina
- ◆ Microalage
- ◆ Palm
- ◆ Jatropha



Original Equipment Manufacturers (OEMs) Position and Engine Warranties



OEMs Positions on Biodiesel

OEMs:

- B100 Must Meet ASTM D 6751
 - Most OEMs fully support B5
 - Most OEM HQs have B20 experience
-
- B20 won't void warranty, but

Problems caused by the fuel are the responsibility of the fuel supplier!

OEMs want to see additional experience in the field



Increasing OEM Support

- ◆ Cummins: B20 across the board
- ◆ New Holland: B20 across the board
- ◆ Caterpillar: B30 across the board
- ◆ DaimlerChrysler approves B20 in 2007 Dodge Ram pickup's used in fleets & B5 factory fill for pickups.
- ◆ CaseIH approves B20 for most models
- ◆ Deere: B100 won't void warranty, B5 or lower recommended for now, B20 later
- ◆ GM: B5, B20 in some models
- ◆ Detroit Diesel: B5
- ◆ VW: B5 across board
- ◆ Diesel powered Jeep Grand Cherokee B5 factory fill



Warranty Statements

Case IH

Caterpillar

Cummins

Detroit Diesel

Ford

GM Motors

International

John Deere

Kubota

Mercedes-Benz

New Holland

UD Trucks/Nissan Diesel

Volkswagen

Volvo



http://biodiesel.org/resources/fuelfactsheets/standards_and_warranties.shtm



Biodiesel: Quality is Job 1..2..3



Fuel Quality



- Fuel quality is of the utmost concern and importance to the biodiesel industry.
- ASTM D 6751 is the specification for biodiesel fuels irrespective of the feedstock source and/or processing method.
 - National Quality Program (BQ-9000) Launched for Biodiesel Marketers and Producers
 - Look for [BQ-9000 Certified Marketers](#): Biodiesel's 'Good Housekeeping' Seal of Approval



Who and What are Accredited

- ◆ Two accreditations possible for companies:
 - BQ-9000 Accredited Producer
 - BQ-9000 Certified Marketer
- ◆ BQ-9000 accredits companies, not fuel
 - There is no such thing as 'BQ-9000 Biodiesel'
 - BQ-9000 does, however, help ensure that biodiesel produced and sold will meet D 6751



Fuel Quality

- ◆ Fuel Quality Outreach Program – State and Federal Agencies & NCWM
- ◆ Fuel Quality Outreach Program - \$1.5 million petroleum industry outreach and education program
- ◆ BQ9000 Quality Assurance Program
 - 18 biodiesel plants = 40% of current production
 - 8 certified marketers
 - <http://www.bq-9000.org/>
- ◆ Fuel Quality Enforcement Guideline –
www.biodiesel.org/resources/fuelqualityguide
- ◆ In 2007 DOE supported effort to expand BQ9000 program and fuel quality message.



Federal Initiatives Impacting Growth



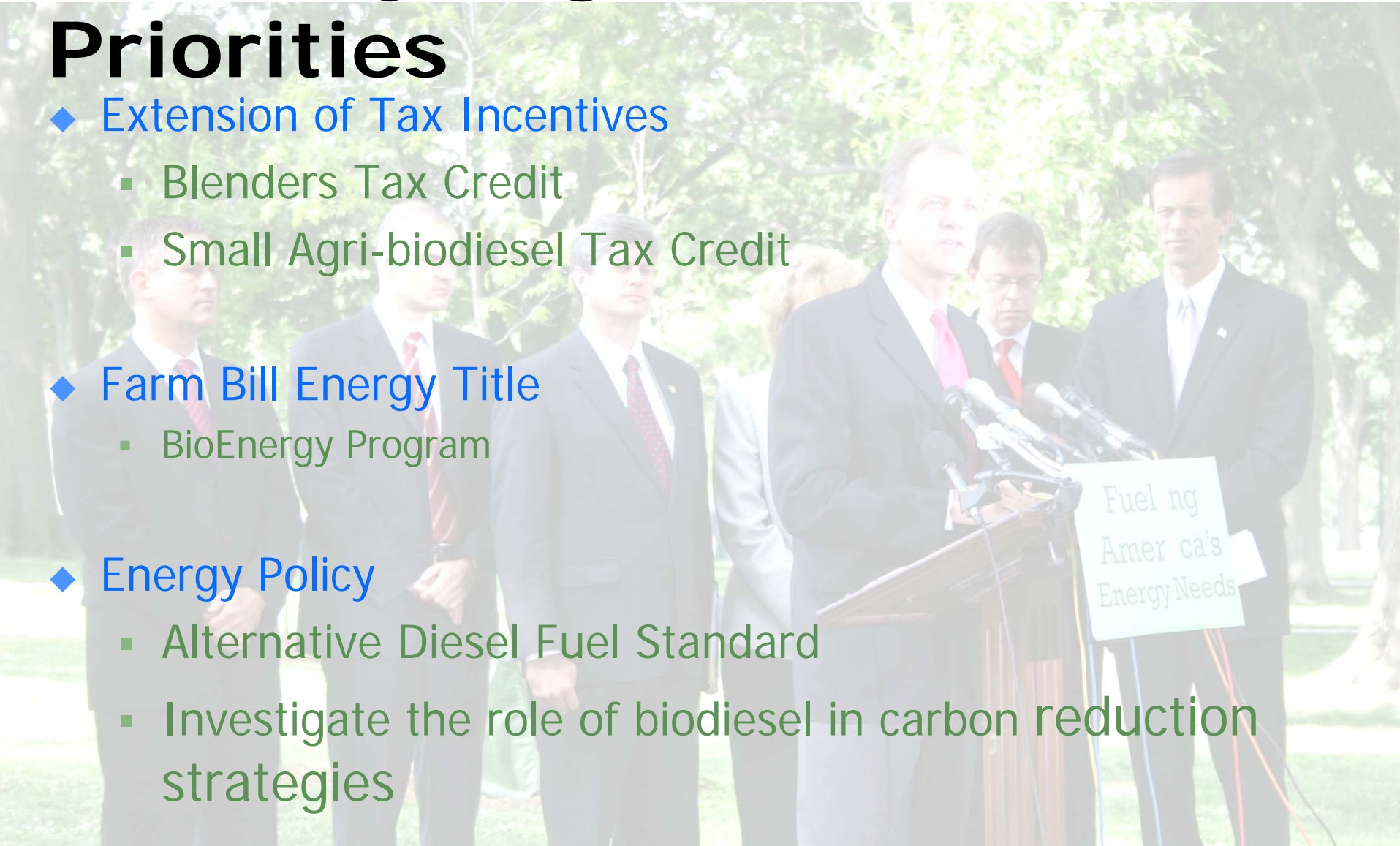
Policy Remains Critical

- ◆ Federal Policy has served as an effective catalyst for the biodiesel industry
 - Biodiesel Blenders Tax Credit
 - Small Agri-biodiesel Income Tax Credit
 - Renewable Fuel Standard



Industry Legislative Priorities

- ◆ Extension of Tax Incentives
 - Blenders Tax Credit
 - Small Agri-biodiesel Tax Credit
- ◆ Farm Bill Energy Title
 - BioEnergy Program
- ◆ Energy Policy
 - Alternative Diesel Fuel Standard
 - Investigate the role of biodiesel in carbon reduction strategies



State Legislation is Important

- ◆ Washington – 2008 B2 mandate
- ◆ Louisiana – 2006 B2 mandate
- ◆ Texas – Partial state excise tax credit exemption on B20 blends
- ◆ New York – State tax exemption on B20 blends
- ◆ Illinois – Sales tax exemption on B11 blends
- ◆ Minnesota – B2 mandate
- ◆ Iowa – State income tax credit for B2 sales



NBB Vision 2015

- ◆ By 2015, biodiesel will be viewed as an integral component of a national energy policy which increasingly relies on clean, domestic, renewable fuels. Positive market dynamics coupled with federal counter-cyclical policy will support a significant and stable market. **Sales, primarily in the form of low level biodiesel blends, will replace 5% of diesel demand by 2015.** Energy security and environmentally driven uses, such as B20, remain a significant and visible source of demand. Grassroots involvement remains a strong & vital strength of the industry.



Educational Resources

NBB (800) 841-5849 –
www.biodiesel.org

www.biodiesel.org

Ask Ben
biodiesel education network

You've got biodiesel questions. **Ben** has quick and accurate answers. Recognized as the nation's most reliable and trusted source for biodiesel information, **Ben** is now available to serve you through an alliance with the National Biodiesel Board and the Petroleum Marketers Association of America. At last, information that you can use to grow your business!

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